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Investor Strategies in the Emerging Economies During the Pandemic: Sectoral wise Evidence from Indian Stock Market

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Abstract - The current empirical study attempts to analyze the impact of COVID-19 on the performance of the emerging economy i.e., the Indian stock market concerning the BSE listed companies in ten sectors (Basic Material, Consumer Discretionary Goods & Services (CDGS), Diversified, Energy, FMCG, Industrials, Information Technology, Healthcare, Telecom, Utilities). The monthly data from February 2020 to August 2021 have been considered in this study. This will help to understand the uncertainty in the market during the pandemic phase-I with the lockdown effect and the phase-II of the market where investor have shifted to different sectors for positive return generation. To assess the impact of COVID-19 on the multiple measures of Total Return, Number of Transactions, Yield, Share Traded, Beta, Market Capitalization, Alpha and Average Recovery Rate is considered in the study. The relation between these indices will states the investors strategies in the Indian market during the Covid-to mitigate the risk and generate a healthy return during the crisis period.

Key Words: Covid-19, Average recovery rate, Total return, sector, Regression, Investor's strategy.

1. INTRODUCTION

The word pandemic automatically brings uncertainty to the market. It has been seen that after every 100 years there is an outburst and in between different time intervals the global world has seen bubbles in the market. This time it is the novel Coronavirus (Covid-19) that brings the uncertain and panic environment in the economies. This uncertainty can be seen in emerging economies like India where the market during the pandemic falls and investors start losing their financials. The objective of the paper is to analyze whether the COVID-19 outbreak causes investors in the Indian Stock market to shift their risk from one sector to another for positive return generation.

The vast body of research is already having abundant studies related to herding behaviour in the past two decades. However, to the best of our knowledge, this study is the pioneering research work to examine the investor strategy in the financial market of switching in different sectors under the present conditions of the COVID-19 pandemic.

2. LITERATURE REVIEW

The impact of COVID-19 isn't comparable to any other financial/global crisis or pandemic as a result of the challenges many investors have lost their financial value. To analyze the impact of the COVID-19 on the return volatility of the Indian stock market in the context of standard deviation, skewness, and kurtosis, taking two composite indices, i.e., BSE 500 and BSE Sensex, and eight sectoral indices of BSE, i.e., Auto, Banks, Consumer Durables, Capital Goods, Fast Moving Consumer Goods, Health Care, Information Technology, and Realty (Rashmi Chaudhary, 2020) . To compare the composite index BSE 500 of India with three global indexes S&P 500 of the US, Nikkei 225 of Japan, and FTSE 100 of the UK. The article examined the herding behaviour in the Indian stock market in the prevalence of the COVID-19 pandemic (Singh, 2020)

(Elie Bouri, 2021)in their study examined the herding behavior of investors in stock markets during the Covid-19 pandemic. Evidence shows that herding behavior is developed more during times of uncertainty. Uncertainty-driven herding behavior was so evident in the emerging stock markets and markets were pandemic hits so badly. Herding behavior is measured by cross-sectional absolute standard deviations (CSAD). Evidence shows that herding exists for a short span

of time and it is driven by the impatience of investors, especially during pandemics. And very frequently the transition from herding to anti-herding can be seen in the market. The Rolling window regressions along with Probit analysis helped to establish the correlation between the herding behavior and the uncertainty of the stock markets at a global level.

(Konstantin B. Kostin, 2021)analyzes the investor's strategies during the Covid-19 pandemic and attempted to compare the returns between the developed markets and emerging markets in terms of their performance. Fama French Three-factor model was used to find the cost of equity for the data used in the study. The regression model is used for analysis and with the help of GRS F- test statistic is used to examine the performance. The results show that emerging markets, as well as the markets in the developed countries, suffered out of the pandemic. The only difference is in terms of the recovery of the market. Emerging markets have better recovery rates than developed markets. But in terms of the performance of individual stocks, companies that recovered from pandemic in developed countries performed far superior to the emerging markets.

(Khushboo Gupta, 2021)evaluated equity investment strategies during the Covid-19 pandemic in the Indian context using the data collected from the Bombay Stock Exchange. The volatility of different equity investment strategies is the main subject of interest of this study. The generalized Autoregressive Conditional Heteroscedasticity (GARCH) technique is used for the analysis of the data. Using seven BSE indices strategies were taken for consideration. Covid-19 period witnesses' volatility for all indices except dividend stability and low volatility indices. The impact of Covid is seen more in IPO strategy. Among the IPO section, SME- IPO was affected more by the pandemic.

Many other researchers in the due course of time have also examined the volatility in the Indian stock market is highly associated with uncertainty in the market, which is the main element in any stock market investment decision. The findings have suggested that volatility is one of the most reliable risk predictors and it makes investors switch and move to different sectors due to uncertain environments. Since January 2020, or more precisely the study by the researchers has started from the last quarter of 2019 itself. Most researchers are working on finding the impact of COVID-19 on various parameters like health, economy, packages, climate change, reverse migration, and many more, focusing their views on global stock markets. Few researchers have also focused on the emerging countries' stock markets because they also affect global trade. None of the studies are conducted pertaining only to the Indian stock market, considering sectoral indices and the investor's trading behavior which show a mitigating strategy.

3. DATA & METHODOLOGY

This study analyses the investor strategies using monthly data of different sectors of the BSE. These sectoral indices of BSE represent the whole industry-wise economy.

3.1 DATA

The data for the study is generated using CMIE database and BSE India portal; the study entirely used the secondary market data for the analysis. The data consider 701 companies in 10 different sectors, as BSE India have more than 5000 companies listed but for the study purpose, we have considered the companies which have highest market capitalization and can affect the market if any information outburst. Financial and banking sector data is not included.

Descriptive statistics are used to measure the Sectoral Monthly Total Return, Number of Transactions, Yield, Share Traded, Beta, Market Capitalization, Alpha, Average Recovery Rate. The test statistic will disclose the two periods context- one is during February 2020 where the Covid-19 have started influencing the economy in its phase-I and then (till August 2021) the phase-II cycles of the pandemic where investors have taken measures.

3.2 METHODOLOGY

1. Market Capitalization (MC)

First drive the monthly market capitalization of the stock, as it will provide the basic framework for the stock consideration in different sectors. The following equation is used:

Market Capitalization = Share Outstanding X Stock Price s (1)

It will tell the total equity value of the company in the market.

2. Total Return (TR)

It is the actual rate of return of an investment or a pool of investments over a given evaluation period.

$$\text{Total Return} = \frac{(P_1 - P_0) + D}{P_0} \quad (2)$$

Where:

P_0 = Initial Stock Price.

P_1 = Ending Stock price (Period 1)

D = Dividends

3. Yield (Y)

The earnings generated and realized on an investment over a particular period of time expressed as percentage.

$$\text{Current Yield} = \frac{\text{Annual Cash Inflows}}{\text{Market Price}} \quad (3)$$

4. Beta (β)

A beta coefficient can measure the volatility of an individual stock compared to the systematic risk of the entire market as it will illustrate the risk of an investors entering into a particular investment decision.

$$\beta = \frac{\text{COV (market, stock)}}{\text{VAR (market)}} \quad (4)$$

Where:

β = Beta

COV (market, stock) = Covariance between the market and the stock.

VAR (market) = Variance of the market

5. Alpha (α)

Alpha (α) describe an investment strategy's ability to beat the market, or its "edge" and generate excess return over ideal market condition.

Alpha = Actual rate of return – Expected rate of return (5)

6. Share Traded (ST)

It will illustrate the number of shares traded in a particular company/sector at a particular time period. which will help to understand the market sentiments of the investors.

7. Number of Transactions (N)

In stock market the buy and sell process goes hand on hand and

the number of transactions shows the trading of investors in a particular sector/company.

8. Recovery Rate (RR)

$$RR = \frac{1 - [R_1 - R_0]}{R_0} \quad (6)$$

Where:

R_0 = Initial Recovery Rate.

R_1 = Ending Recovery Rate (Period 1)

Regression Equation:

The regression equation used for the analysis is given below:

$$Y = m*MC + m*Y + m*\beta + m*\alpha + m*ST + m*N + m*RR + b \quad (7)$$

Where:

Y= Dependent Variable of Regression (Total Return)

m= Slope of the regression

MC= Market Capitalization

Y = Yield

β = Beta

α = Alpha

ST = Share Traded

N = Number of Transactions

RR = Recovery Rate

b = Constant

So, all these factors are used to study role of investor in the stock market to overcome uncertainty. To understand better the paper put the pathway as per the below mentioned flowchart:

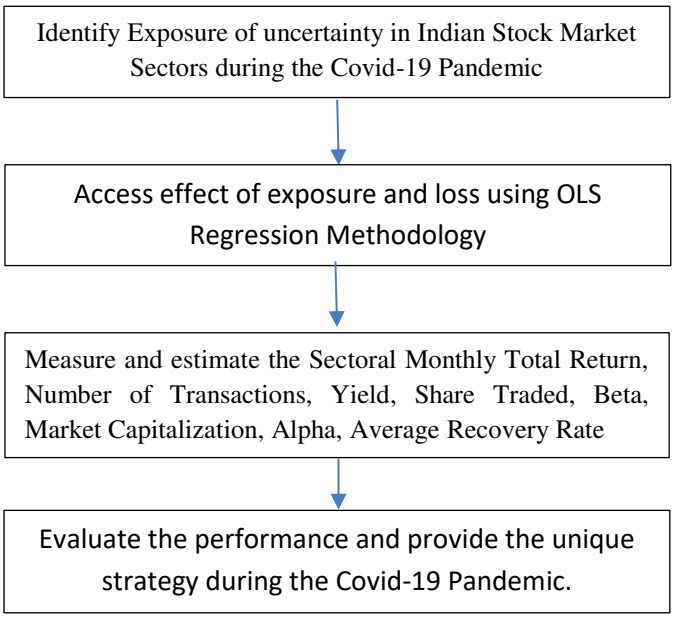

Fig.-1: Demonstrate the Flowchart of the research

4. DATA ANALYSIS

This paper uses SPSS software for data analysis and the sectoral findings based on the analysis are given below:

4.1. DESCRIPTIVE STATISTICS

Descriptive statistics results recapitulate the descriptive co-efficient of the data. The results include Mean, Standard deviation which represents the measure of location and measures of dispersion. Standard deviation gives the amount of variation from its respective means. Mean provides the average value.

Table-1: Descriptive Statistics for Basic Materials Sector.

Descriptive Statistics (BASIC MATERIALS)			
	Mean	Std. Deviation	N
Total Return	-0.025120	2.0340961	19
BETA	1.358049	0.0340737	19
MARKET CAPITALISATION	109541.524185	36492.8228233	19
ALPHA	0.239497	0.0249895	19
SHARE TRADED	183935.563789	99657.3268902	19
YIELD	1.748931	0.6048230	19
Number of Transactions	1900.356632	686.9911758	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-2: Descriptive Statistics for Diversified Sector.

Descriptive Statistics (DIVERSIFIED)			
	Mean	Std. Deviation	N
Total Return	0.483947	2.6475135	19
BETA	1.472895	0.0441451	19
MARKET CAPITALISATION	31315.036447	7933.4116379	19
ALPHA	-0.096579	0.0499528	19
SHARE TRADED	58112.526316	48218.8290635	19
YIELD	1.731053	0.2427423	19
Number of Transactions	1363.355263	907.2887813	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-3: Descriptive Statistics for FMCG Sector.

Descriptive Statistics (FMCG)			
	Mean	Std. Deviation	N
Total Return	-0.088989	1.8786760	19
BETA	1.171242	0.0622554	19
MARKET CAPITALISATION	297473.686500	34049.4924516	19
ALPHA	0.242478	0.0968071	19
SHARE TRADED	137445.835422	77046.1007749	19
YIELD	1.103074	0.3127658	19
Number of Transactions	1787.342523	576.5750161	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-4: Descriptive Statistics for consumer Goods sector.

Descriptive Statistics (CONSUMER GOODS)			
	Mean	Std. Deviation	N
Total Return	-0.149962	1.6491996	19
BETA	1.263198	0.0158843	19
MARKET CAPITALISATION	107214.080763	22555.3180982	19
ALPHA	0.062867	0.0462370	19
SHARE TRADED	156268.377675	73693.1984109	19
YIELD	1.170943	0.8413616	19
Number of Transactions	1512.299017	483.4744529	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-5: Descriptive Statistics for Energy Sector.

Descriptive Statistics (ENERGY)			
	Mean	Std. Deviation	N
Total Return	0.145579	2.1867928	19
BETA	1.123605	0.0161078	19
MARKET CAPITALISATION	896914.712842	133841.3475040	19
ALPHA	0.107342	0.0630573	19
SHARE TRADED	413129.960526	200420.2553043	19
YIELD	3.233079	0.3757686	19
Number of Transactions	5040.176316	1837.6828416	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-6: Descriptive Statistics for Healthcare Sector.

Descriptive Statistics (HEALTHCARE)			
	Mean	Std. Deviation	N
Total Return	-0.089753	1.9459171	19
BETA	1.002062	0.0500475	19
MARKET CAPITALISATION	152839.552002	29700.4012646	19
ALPHA	0.106910	0.0229555	19
SHARE TRADED	87677.653907	34832.7710298	19
YIELD	0.754872	0.2648304	19
Number of Transactions	2218.042265	837.4907432	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-7: Descriptive Statistics for Industrials Sector.

Descriptive Statistics (INDUSTRIALS)			
	Mean	Std. Deviation	N
Total Return	0.035291	1.8816634	19
BETA	1.335089	0.0404595	19
MARKET CAPITALISATION	80483.804114	24745.1999745	19
ALPHA	0.002076	0.0397962	19
SHARE TRADED	258662.283241	138458.4896508	19
YIELD	1.392535	0.6267466	19
Number of Transactions	1650.368421	555.1856663	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-8: Descriptive Statistics for Telecom Sector.

Descriptive Statistics (TELECOM)			
	Mean	Std. Deviation	N
Total Return	-0.415000	1.7549712	19
BETA	1.289461	0.0507418	19
MARKET CAPITALISATION	293812.235789	37603.7761610	19
ALPHA	-0.148252	0.0666285	19
SHARE TRADED	1159283.857143	1010733.8242146	19
YIELD	1.323985	0.4169770	19
Number of Transactions	11152.939850	4014.9485081	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-9: Descriptive Statistics for IT Sector.

Descriptive Statistics (IT)			
	Mean	Std. Deviation	N
Total Return	-0.087100	1.8230730	19
BETA	1.198512	0.0688056	19
MARKET CAPITALISATION	460899.450290	122730.7817419	19
ALPHA	0.128525	0.0466083	19
SHARE TRADED	209936.752954	133889.2175906	19
YIELD	1.737525	0.9272338	19
Number of Transactions	2138.383459	758.7854622	19
% Average of Total Recovered	0.966756	0.0475001	19

Table-10: Descriptive Statistics for Utilities Sector.

Descriptive Statistics (UTILITIES)			
	Mean	Std. Deviation	N
Total Return	-0.192265	1.8320224	19
BETA	1.156224	0.0347606	19
MARKET CAPITALISATION	207659.618398	51057.3776230	19
ALPHA	-0.129794	0.0032028	19
SHARE TRADED	1686658.528604	1244967.1256001	19
YIELD	3.178375	0.6744127	19
Number of Transactions	2905.302059	1668.4541277	19
% Average of Total Recovered	0.966756	0.0475001	19

Descriptive statistics results show the mean values and standard deviation sectoral wise. It can be inferred that Basic Materials, Energy and Diversified sectors have the highest standard deviation from their mean values. Higher values of deviation in these sectors shows that they are more volatile in nature. In that case the least volatile among these sectors are Consumer Goods and Telecom sector.

4.2. MODEL SUMMARY

Model summary results sum up the strength of relationship between the regression model and the Total returns (Dependent Variable).

Table-11: Model Summary for Basic Materials Sector.

Model Summary[b] (BASIC MATERIALS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.913[a]	0.834	0.728	1.0600122	0.834	7.897	7	11	0.001	2.563

a. Predictors: (Constant), % Average of Total Recovered, ALPHA, SHARE TRADED, MARKET CAPITALISATION, Number of Transactions, YIELD, BETA

b. Dependent Variable: Total Return

Table-12: Model Summary for Diversified Sector.

Model Summary[b] (DIVERSIFIED)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.861[a]	0.741	0.577	1.7225176	0.741	4.503	7	11	0.013	1.660

a. Predictors: (Constant), % Average of Total Recovered, BETA, Number of Transactions , MARKET CAPITALISATION, SHARE TRADED, YIELD, ALPHA

b. Dependent Variable: Total Return

Table-13: Model Summary for FMCG Sector.

Model Summary[b] (FMCG)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.847[a]	0.717	0.536	1.2790494	0.717	3.976	7	11	0.021	1.903

a. Predictors: (Constant), % Average of Total Recovered, Number of Transactions, BETA, SHARE TRADED, MARKET CAPITALISATION, YIELD, ALPHA

b. Dependent Variable: Total Return

Table-14: Model Summary for Consumer Goods Sector.

Model Summary[b] (CONSUMER GOODS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.765[a]	0.586	0.322	1.3581457	0.586	2.220	7	11	0.114	2.127

a. Predictors: (Constant), % Average of Total Recovered, SHARE TRADED, ALPHA, BETA, Number of Transactions , MARKET CAPITALISATION, YIELD

b. Dependent Variable: Total Return

Table-15: Model Summary for Energy Sector.

Model Summary[b] (ENERGY)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.922[a]	0.850	0.755	1.0822749	0.850	8.927	7	11	0.001	1.615

a. Predictors: (Constant), % Average of Total Recovered, SHARE TRADED, BETA, ALPHA, Number of Transactions, YIELD, MARKET CAPITALISATION

b. Dependent Variable: Total Return

Table-16: Model Summary for Healthcare Sector.

Model Summary[b] (HEALTHCARE)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.607[a]	0.368	-0.034	1.9787381	0.368	0.915	7	11	0.529	3.069

a. Predictors: (Constant), % Average of Total Recovered, ALPHA, Number of Transactions, BETA, SHARE TRADED, YIELD, MARKET CAPITALISATION

b. Dependent Variable: Total Return

Table-17: Model Summary for Industrials Sector.

Model Summary[b] (INDUSTRIALS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.848[a]	0.719	0.540	1.2761390	0.719	4.019	7	11	0.020	1.504

a. Predictors: (Constant), % Average of Total Recovered, ALPHA, SHARE TRADED, BETA, Number of Transactions, MARKET CAPITALISATION, YIELD

b. Dependent Variable: Total Return

Table-18: Model Summary for Telecom sector.

Model Summary[b] (TELECOM)										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.734[a]	0.538	0.244	1.5256683	0.538	1.831	7	11	0.178	1.237
a. Predictors: (Constant), % Average of Total Recovered, SHARE TRADED, BETA, Number of Transactions, MARKET CAPITALISATION, ALPHA, YIELD										
b. Dependent Variable: Total Return										

Table-19: Model Summary for Information Technology (IT) Sector.

Model Summary[b] (IT)										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.751[a]	0.564	0.287	1.5394318	0.564	2.035	7	11	0.141	2.053
a. Predictors: (Constant), % Average of Total Recovered, ALPHA, SHARE TRADED, Number of Transactions, MARKET CAPITALISATION, YIELD, BETA										
b. Dependent Variable: Total Return										

Table-20: Model Summary for Utilities Sector.

Model Summary[b] (UTILITIES)										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.818[a]	0.670	0.460	1.3466646	0.670	3.188	7	11	0.042	1.991
a. Predictors: (Constant), % Average of Total Recovered, BETA, SHARE TRADED, ALPHA, Number of Transactions, YIELD, MARKET CAPITALISATION										
b. Dependent Variable: Total Return										

Regression results shows that Basic material and Energy sector is having highest degree of association between Total returns and other independent variables. The interpretation to this result is that even during pandemic situation sectors that deals with the basic necessities of life sustained the degree of association and strength of the relationship between the returns and other predictor variables.

4.3 ANOVA ANALYSIS

The significance of the results of the study is tested using ANOVA analysis. The research composes of ten independent sectors and therefore ONE WAY ANOVA test is conducted.

Table-21: ANOVA Analysis of Basic Material Sector.

ANOVA[a] (BASIC MATERIAL)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.116	7	8.874	7.897	.001[b]
	Residual	12.360	11	1.124		
	Total	74.476	18			

Table-22: ANOVA Analysis of Diversified Sector.

ANOVA[a] (DIVERSIFIED)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.530	7	13.361	4.503	.013[b]
	Residual	32.638	11	2.967		
	Total	126.168	18			

Table-23: ANOVA Analysis of FMCG Sector.

ANOVA[a] (FMCG)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.534	7	6.505	3.976	.021[b]
	Residual	17.996	11	1.636		
	Total	63.530	18			

Table-24: ANOVA Analysis of Consumer Goods Sector.

ANOVA[a] (CONSUMER GOODS)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.667	7	4.095	2.220	.114[b]
	Residual	20.290	11	1.845		
	Total	48.957	18			

Table-25: ANOVA Analysis of Energy Sector.

ANOVA[a] (ENERGY)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.193	7	10.456	8.927	.001[b]
	Residual	12.885	11	1.171		
	Total	86.077	18			

Table-26: ANOVA Analysis of Healthcare Sector.

ANOVA[a] (HEALTHCARE)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.089	7	3.584	.915	.529[b]
	Residual	43.069	11	3.915		
	Total	68.159	18			

Table-27: ANOVA Analysis of Industrials Sector.

ANOVA[a] (INDUSTRIALS)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.818	7	6.545	4.019	.020[b]
	Residual	17.914	11	1.629		
	Total	63.732	18			

Table-28: ANOVA Analysis of Telecom Sector.

ANOVA[a] (TELECOM)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.834	7	4.262	1.831	.178[b]
	Residual	25.604	11	2.328		
	Total	55.439	18			

Table-29: ANOVA Analysis of Information Technology Sector.

ANOVA[a] (INFORMATION TECHNOLOGY)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.756	7	4.822	2.035	.141[b]
	Residual	26.068	11	2.370		
	Total	59.825	18			

Table-30: ANOVA Analysis of Utilities Sector.

ANOVA[a] (UTILITIES)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.465	7	5.781	3.188	.042[b]
	Residual	19.949	11	1.814		
	Total	60.414	18			

Note:
a. Dependent Variable: Total Return
b. Predictors: (Constant), % Average of Total Recovered, Share Traded, Alpha, Beta, Number of Transactions, Market Capitalization, Yield

The ANOVA results gives a F-value greater than 1 in all sectors. This implies that there is significant difference between the means of ten sectors used in the study. Significance value in ANOVA table shows the significance level between variables. Except Basic Material all other sectors there is no significance between variables.

After running regression, we tried to compare the results with covid phases. From the Figure 2 given it can be inferred that Energy and Diversified Sector witnessed steady growth during phase 1 and Phase 2 of Covid-19. All other sectors were underperforming during Phase 1 and slowly started recovering after Phase 1 of Covid.

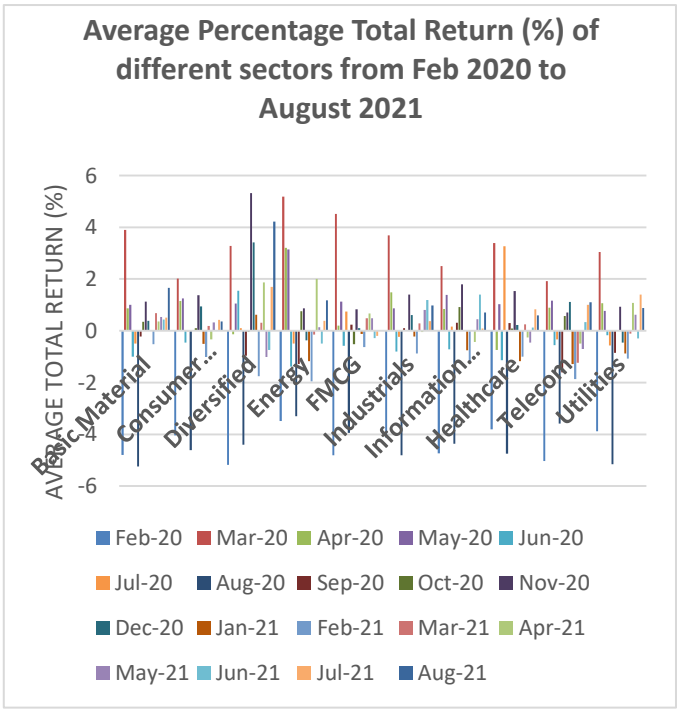

Fig. 2. Average Total Return (%) of sectors from Feb 2020 – August 2021

From Figure 3 it can be inferred that Energy Sector is the only sector that performed consistently in both Phase 1&2 of the Covid-19. Followed by Energy sector the Information Technology, FMCG and Telecom sectors starts recovering in terms of market capitalization.

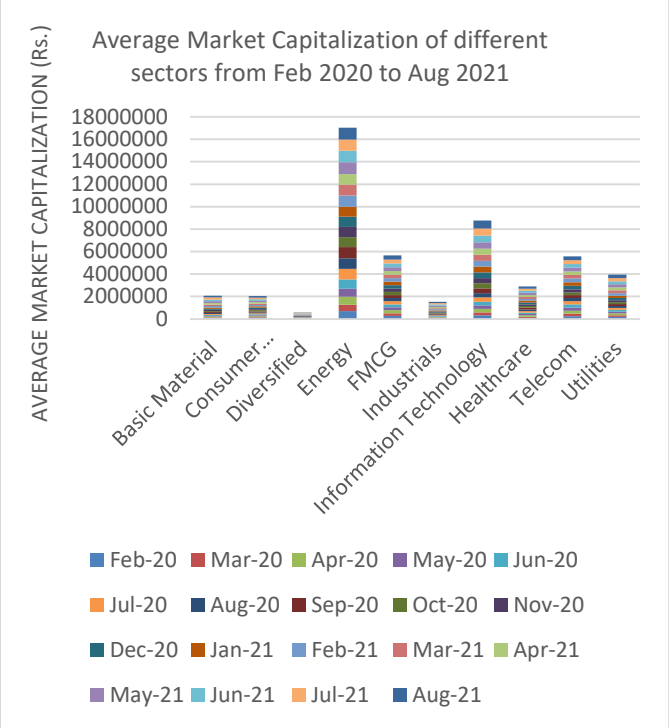

Fig. 3. Average Market Capitalization (Rs.) of sectors from Feb 2020 – August 2021

5. FINDINGS

This study attempts to find the impact of Covid-19 on stock returns in Indian context. Based on the regression model conducted with ten selected sectors Basic Materials and Energy sectors shows highest amount of correlation between total returns and other independent variables (r = 0.913, r = 0.922). Healthcare and Telecom sectors shows comparatively low correlation between total returns and other independent variables (r= 0.607, r = 0.734). R-square value explains the variation for the total returns that can be explained by the predictors. Except Health care sectors all other sectors have an R-square value sufficient to explain the relationship. Basic material and Energy sector have the highest R-square values (R-square = 0.834, R-square = 0.850) which shows that almost 85% of the variation of total returns is explained using independent variables used in the study. Durbin Watson is conducted to identify the autocorrelation and it is found that Information Technology (IT), Healthcare, Consumer Goods and Basic Materials sectors have a value of more than 2 which indicates that there is negative correlation. Sectors other than those mentioned above are all having a Durbin Watson value less than 2 which means that they are having positive correlation. The ANOVA results shows the significance of data used in the study. While analyzing the P-values of each sector it can be inferred that Basic Material and Energy is having a P- value less than .05 and all other sectors are having a P-value greater than .05. It shows that results are significant. F-statistic helps to find the joint effect of all variables used in the study. Except healthcare sector all other sectors are having a F-value greater than 1, which implies that results are significant. It shows that model is efficient. Overall, the results shows that model is significant.

6. CONCLUSIONS

The findings of the current research are successful to an extend to depict the situation of Covid-19 pandemic and its impact on different sectors taking total returns as a proxy. Basic Materials and Energy sectors are the only sectors that exhibit high degree of association during Covid. This implies that diversifying one's portfolio into these sectors can be bring steady returns in spite of uncertainty in the market. The returns are also dependent on the uncertainty factor that always exist in the market. So as far an investor is concerned it is always better to go with diversification strategy which includes those stocks that can give steady return and at the same time dynamic stocks that can give more return during shocks.

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